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AUTHOR Fiechtner, Susan Brown; Krayer, Karl J.
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ABSTRACT

A study was conducted (1) to investigate factors that influence an instructor's choice of behavior when confronted with incidents of students' poor communication performance, and (2) to demonstrate how attribution theory can be used as a vehicle for describing and understanding the causes of instructor reactions or behaviors. The study sought to apply to an educational setting the Green and Mitchell model (which suggests that leaders, given evidence of subordinate performance, infer the causes of the performance prior to determining the appropriate action to take). The method involved distributing a memo among speech communication faculty members at three midwestern universities requesting written examples of poor student communication performance, administering two reliability checks, and using an instrument centering upon six episodes of poor communication performance. The results indicate, first, that in instructors' evaluations of poorly performing students, there was an internal instructor bias to attribute causality more to internal factors than to external factors, which increased when the work history of the student was poor and the outcome was serious. Second, the behaviors chosen as responses to the poor performance were related to the attributions and the surrounding circumstances. The more internal the attribution, the more the response was directed at the student. (EL)

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# INSTRUCTOR RESPONSES TO POOR STUDENT COMMUNICATION PERFORMANCE: AN ATTRIBUTIONAL INTERPRETATION

Susan Brown Fiechtner
Department of Speech Communication and Theatre Arts
Texas A&M University
College Station, Texas 77843

Karl J. Krayer
Department of Speech Communication
Texas Christian University
Fort Worth, Texas 76129

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## Abstract

The purpose of this study was to investigate factors which influence an instructor's choice of behavior when confronted with incidents of poor communication performance. The data indicate that communication instructors were acting in a manner consistent with the hypotheses suggested by the attribution model presented by Mitchell and Green (1978) and Green and Mitchell (1979). A summary of our findings is as follows. First, in their evaluation of students involved in an incident of poor performance, there was an internal bias on the part of instructors to attribute causality more to internal factors than to external factors. This bias towards internal attributions was increased when the work history of the student was poor and when the outcome was serious. Second, the behaviors chosen as responses to the poor performance were related to the attributions and the surrounding circumstances. The more internal the attribution, the more the response was directed at the student.

## INSTRUCTOR RESPONSES TO POOR STUDENT COMMUNICATION PERFORMANCE: AN ATTRIBUTIONAL INTERPRETATION

Attribution theory is concerned with how individuals assign enduring traits or dispositions to themselves and other persons in an attempt to depict the process that individuals follow in establishing an order to the events confronting them (Heider, 1957; Jones & Davis, 1965, Kelley, 1971, 1973; Nisbett & Valins, 1971). The theory assumes that individuals have a need to understand and explain the events around them, and that based upon that need, they will develop a lay or "naive" psychology of behavior (Heider, 1958).

Heider (1958) suggested that three variables are important in the attribution process: (1) the intent or motivation of the actor (internal force), (2) the ability of the actor (mediating force), and (3) the environment (external force). Building upon Heider's original notion of internal and external attributions, Harold Kelley's 1967 model posited that an attribution is the end product of a rational process which focuses upon the inferring of the causes of an event or behavior. Kelley's analysis was based on his belief that a perceiver collects the information that he or she needs to explain an actor's behavior from three sources. A perceiver, consciously or unconsciously, collects information about how often an actor had performed a behavior under similar circumstances in the past (consistency information), how often an actor performed the same behavior in different circumstances (distinctiveness information), and finally, how many other individuals performed the same behavior in those circumstances (consensus information.) In summary, a perceiver uses these three sources to arrive at a meaningful causal explanation of behavior.

## Attributions in the Classroom

A rapidly expanding area of research which has proven useful in understanding how individuals ascribe causal attributions for behavior focuses on instructors' and students' explanations for classroom behavior. As the following literature review indicates, the study of attributional processes has been applied to two basic aspects of educational settings: (1) factors influencing instructor's attributions of students and (2) factors influencing students' attributions of instructors.

Research into instructor's attributions for student's behavior has, for the most part, been limited to studies of the explanations that instructors give for students' successes or failures. For instance, research interpretations have been presented for such topics as lack of effort (Weiner & Kukla, 1970; Omelich, 1974), closeness of supervision (Kruglanski, 1970; Strictland, 1958), consistency with past performance (Weiner, 1972), motivation and ability (Weiner & Kukla, 1970), use of rewards (Rothbart, 1968), initial classifications or expectancy theory (Rist, 1970), objectivity and detachment (Jackson, Silberman, & Wolfson, 1969), task difficulty (Weiner & Kukla, 1970), actual cognitive processes involved in forming perceptions (Hargreaves, 1977), and facial attractiveness (Algozzine, 1977). Not surprisingly, this research has indicated that teachers attribute the cause of student improvement to themselves and the cause of student failures to external factors (Beckman, 1970; Ross, Bierbrauer & Polby, 1974). When student success or failure is unexpected, it is attributed to external causes (Feather, 1969).

Likewise, numerous variables concerning students' attributions of teachers have been examined. Investigations have been conducted on such topics as interpersonal attraction (Berger, 1973), teacher instructions (Kukla, 1972; Weiner & Sierad, 1975), verbal appeals (Dweck & Bush, 1978), verbal feedback

(Meyer & Spiller, 1979), references to causality (Dweck, 1975; Andrews & Debus, 1978), tangible rewards and punishments (Ames, Ames & Felker, 1977), achievement consistency (Frieze & Weiner, 1971; Meyer, 1980), causal schemata (Bar-Tal, 1974; Kun & Weiner, 1973; Kun, 1977), background and attitude similarity (Berger, 1975), non-verbal cues (McMahon, 1976), linguistic diversity (Bradac, Konsky, & Davis, 1976), time (Frieze & Weiner, 1971), language influence (Cooper, 1979; Good & Brophy, 1979; Hargreaves, 1972; Bar-Tal & Guttmann, 1981), race and socio-emotional status (Neale, 1972; Falbo, 1975), demographic status (Weiner, 1974), social relationships (Meighan, 1978), damaging feedback and negative criticism (Dweck & Bush, 1976; Dweck & Gillard, 1975), age and sex differences (Nicholls, 1975; Rogers, 1980; Smith, 1980), self-esteem (Covington & Omelich, 1979; Ames & Felker, 1979; Fitch, 1970), and social relationships (Meighan, 1978).

## Rationale

At the forefront of much scholarly attribution inquiry is the two-step attributional model proposed by Green and Mitchell (1979). This model suggests that leaders, given evidence of subordinate performance, infer the causes of the performance (i.e., make attributions) prior to determining the appropriate action to take. The attributional model presented by Green and Mitchell includes two main links (see Figure 1 which adapts this model to an educational setting.)

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Insert Figure 1 about here

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First, in Link 1, instructors are presented with an incident of poor performance (e.g., tardiness, poor classroom performance, a missed deadline,

disruptive behavior), and they try to figure out the cause of the behavior. This process involves sorting through a variety of informational cues and results in an attribution. This attribution typically involves a judgment about whether something about the student was the cause (e.g., his or her personality, ability, or effort) or whether the cause was external to the student (e.g., a difficult task, lack of support, insufficient information).

Of primary concern for Link 1 is an attempt to explain what information the leader uses to make an attribution of causality. Green and Mitchell's model utilizes Kelley's (1967) three factors (distinctiveness, consistency, and consensus) to explain how the initial attribution is formed. Distinctiveness refers to the degree to which the student performs poorly or well on other types of tasks. High distinctiveness (i.e., the student performs well on other tasks but poorly on the one in question) is likely to lead to an external attribution by the instructor (i.e., this assignment was too difficult for the student). Consistency refers to how well the student has done on similar tasks. Low consistency (i.e., the student has done well on this type of assignment in the past) would also lead to an external attribution by the instructor. Finally, consensus refers to how other students perform on this particular task. High consensus (i.e., everyone seems to do poorly) would also lead to an external attribution by the instructor.

The second link in the model involves the relationship between the assumed cause or attribution and the instructor's response. That is, given that a poor performance has occurred and a specific attribution has been made, the question becomes how does the instructor respond to the student: what does he or she do about it? This second link is especially important, because most of the literature on attribution theory has focused on the causes of attributions,

while little work has been concerned with their consequences. A major emphasis of the model is based on predicting how instructors actually respond to poor performance.

The Green and Mitchell model has evoked a series of empirical tests (Green & Liden, 1980; Mitchell & Wood, 1980; Knowlton & Mitchell, 1980, McFillen & New, 1979), but has never been tested in an educational setting using teachers as leaders and students as subordinates. This is an important void to fill, for the consensus of the above research and other reports (Grellar & Herold, 1975; Nadler, 1979), is that performance feedback from instructors is an important aspect of shaping behavior in classroom settings. At the present time we do not adequately understand the evaluation process itself. Accepting the notion that attribution theory is an important focus for the study of leadership and supervision, attributions should play an important role in explaining how performance evaluations are determined in educational settings. For instance, instructors are called upon in the course of their work to provide direction for their students, to assess the responses of their students to that direction, and then to react appropriately to their responsibilities as advisors and teachers. Frequently teachers are required, within the formal or informal context of the educational setting, to respond to their perceptions of the "facts" by making assumptions concerning the motivation or intent underlying a student's behavior. Such a process of causal analysis affects the nature of future interactions between the teacher and the student. Further, it seems reasonable to assume that teachers, like other leaders, assess the causes of poor student performance prior to deciding how to react or evaluate the performance. The response of an instructor may well be determined on the basis of work history and severity of the poor performance. For an instructor to conclude that a particular pupil is lazy will be of substantial significance if that instructor typically attributes

success to a good work history and failure to a poor work history. Gaining knowledge of these attributional patterns and the circumstances under which they occur will greatly aid our attempts to understand the ways in which instructors react to students' poor performances.

Our research stems from an investigation conducted by Mitchell and Wood (1980) which utilized Green and Mitchell's (1979) original leadership attribution model. Although both experiments utilized the same basic procedures, Mitchell and Wood tested the model in a medical setting where nursing supervisors were asked to respond to poor performances by their subordinates. The results of Mitchell and Woods' investigation revealed that (1) consensus, consistency, and distinctiveness helped in determining attributions, (2) internal attributions led to punitive responses on the part of the nursing supervisors, and (3) supervisors used more internal attributions and punitive responses when the consequences of the poor performances were severe as compared with non-severe.

A major similarity between the Mitchell and Wood investigation and our study is the desire to focus on poor subordinate (student) performances rather than good ones. The reason for this decision is two-fold. First, in a classroom setting instructors are more likely to be called upon to justify low grades given for poor performances rather than high grades given for above average performances. Therefore, a knowledge of not only why, but how instructors arrived at the specific responses to poor performances would be most helpful in the understanding this justification process. Also, there should be added benefits for students, in that instructors, with information about how and why they react to poor performances will be able to supply higher quality and more substantial, meaningful feedback, including more helpful recommendations for

future performances.

Hence, the purpose of our research is to apply the Green and Mitchell model to an educational setting. This investigation demonstrates how attribution theory can be used as a vehicle for describing and understanding the causes of instructor reactions or behaviors. We believe that such an examination is useful and appropriate for a variety of reasons. First, research has shown that leaders attempt to determine what causes a subordinate's behavior before choosing a means to influence that behavior (Banks, 1976; Kipuis, 1972). One objective is to test whether the same process occurs with teachers in classroom settings.

We see the major impact of our effort, therefore, as (1) generalizing attribution research to a new context, (2) providing an overall theoretical framework for the explanation of instructor behavior, and (3) emphasizing some attributional relationships that have been largely unexplored until now.

**Hypotheses**

Specifically, our study to examines the same four hypotheses which were first investigated in the Mitchell and Wood (1980) research, but changes the setting to an educational context and performances to communication behaviors.

The primary concern of our first hypothesis is derived from Link 1 (see Figure 1) which attempts to explain what information the instructor uses to make an attribution of causality. Building upon the information that Kelley (1967) originally suggested concerning distinctiveness, consistency, and consensus, we hypothesize the following:

$H_1$: Good work history (high distinctiveness, low consistency, and high consensus) will result in external instructor attributions, while poor work history (low distinctiveness, high consistency, and low consensus) will result in internal instructor attributions.

The second hypothesis in our investigation concerns the actual consequences of the students' poor performances. Based upon the Green and Mitchell model and previous research (Kosen & Jerdee, 1974), the consequences of poor performance may result in either minor or major difficulties. Based on this information, our second hypothesis stated the following:

$H_2$: The more severe the consequences of a student's performance, the more an instructor will make internal attributions and desire to respond in a punitive and personal way toward the student.

The attribution model we adopt assumes that attributions are directly related to responses. For instance, when an instructor makes an internal attribution, he or she would direct the response toward the student in an attempt to change the behavior. However, when an external attribution is made by an instructor, the response would be directed toward changing either the situation or the task. Hence, our third hypothesis is as follows:

$H_3$: When an internal attribution is made, the instructor will direct a response toward the student in an attempt to change the student's behavior, and, when an external attribution is made, the instructor will direct a response toward modifying the situation or task.

Finally, evidence presented in the Green and Mitchell (1979) research suggests that, in general, supervisors will see poor performance as more internally rather than externally caused. We have reason to believe that this would occur in a classroom setting also. Therefore, our final hypothesis predicts the following:

$H_4$: Instructors will perceive students' poor performance as significantly more internally rather than externally caused.

## Method

In the first stage of the project, a memo was distributed among speech communication faculty members at three midwestern universities requesting written examples of poor student communication performances which they had witnessed in their classrooms. The instructions were as follows: "in the space below list three (3) examples of the poorest performances that you can remember occurring in your classes. Then, in one sentence relate why you think they occurred and how you responded to each circumstance. Make sure that your examples and explanations are based upon communication behaviors. Feel free to use all types of public presentations--such as interviews, small group discussions, debates, interpretations, etc."

Twenty-five instructors participated. The incidents they generated served as stimulus material, and the information about potential causes and responses helped us to develop realistic scales on which communication instructors could respond in the study. From the incidents we received, those which had the following characteristics were selected for use in the study.

First, we ruled out any incidents that were too extreme or so grossly inappropriate that an idiosyncratic university policy would be called into play. Second, we chose types of incidents that seemed to have a high frequency of occurrence. The incidents must have been problems with which instructors would be familiar. Third and last, we chose incidents for which both a serious or nonserious outcome was possible since this was a variable we wished to manipulate.

The second stage of the research involved two reliability checks concerning the items included on our instruments. Two hundred thirty-three undergraduate students at a large Southwestern university completed two questionnaires for

these reliability checks. The first questionnaire included nineteen items, representing attributions for various types of communication performances which were included in the instrument used in this study. Eleven of these items were intended to reflect an instructor's perception of an internal or student cause for a poor performance, and eight other items were constructed to reflect an instructor's perception of an external or situational cause for a poor performance. The participants were asked to read each item and indicate whether the statement reflected an internal or external cause for poor performance. The results are reported in Table 1, which reveal that our intended classifications were overwhelmingly confirmed.

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Insert Table 1 about here

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The second questionnaire included twenty items which represented instructors' responses to various types of performances included in the instruments. As in the Mitchell and Wood (1980) research, seven items represented a positive response to the student, nine items represented a negative response to the student, and four items represented a response directed toward changing the situation. Students were asked to indicate which of these three types of responses each statement represented. As the results in Table 2 reveal, our intentions for each of these items were confirmed.

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Insert Table 2 about here

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The final stage of the experiment utilized an instrument centering upon six episodes of poor communication performance. Based on consistency, consensus, and distinctiveness, three levels of work history for the student in question

were used (good work history, no work history, and poor work history), along with two levels of outcome severity (severe, not severe). These manipulations produced a 3 x 2 design with each case representing one cell. Each respondent read six cases which represented all six conditions and responded by marking attributions and responses.

**Subjects**

Twenty-nine speech communication faculty members from two major midwestern universities participated in the study. The participants ranged in rank from graduate teaching assistants to associate professors.

**Manipulations**

Each of the six episodes provided a work history for the student in question. The students were described either as (1) having done well on other tasks, having done well on this task in the past while their peers also had difficulty with this task (i.e., a good work history--high distinctiveness, low consistency, high consensus), or (2) having done poorly on other tasks, having made similar mistakes before, while their peers seldom made this error (i.e., a poor work history--low distinctiveness, high consistency, low consensus). A third condition had no work history.

The no work history condition was unique in that respondents did not receive any information regarding the distinctiveness, consistency or consensus of the students' performance. Under this condition, respondents had to make attributions and responses from a more limited information base than in the good or poor work history conditions.

Information concerning the seriousness of the outcome was also provided as information within each episode. There were six different episodes representing six different experimental conditions. An incident of poor

performance with a nonserious outcome and a good work history is presented below.

Incident:

During a ten minute interview role play, Martha was unable to continue her line of questioning after three minutes. She stuttered, stammered, and remarked that she'd "forgotten all her questions." Martha and her partner Gwen promptly returned to their seats. Gwen reported that they had practiced the interview on several occasions, and that Martha had never had a problem before. The interview, counting 3% of the final grade, was being used mainly as a "practice session" for an upcoming major project.

Work History:

Martha has performed frequently in this class, but this was the first time she was unable to complete an assignment. In the past, Martha made average to excellent ratings on her public presentations. Five other teams in the class exhibited similar behavior during the ten minute performance.

**Measures**

There were three types of measures: manipulation checks, attributions, and responses. One manipulation check was "How serious do you feel the actual outcome described in the incident was for the particular student involved?" Responses were made on a "not at all serious" to "very serious" seven-point scale. The second manipulation check was, "If a work history was provided, to what extent do you feel the student was generally a good performer?" The responses were on a seven-point "poor performer" to "good performer" scale.

The attribution questions provided eight possible causes for the students' performance. Four of these were internal (e.g., "the student was not putting

enough effort into her work"), and four were external (e.g., "the instructor did not give adequate information"). The participants responded to each attribution on a "very likely cause" to "very unlikely cause" seven-point scale. The four internal items were summed to form an internal composite. In addition, a summary question was asked that inquired, "in general, how important do you feel the student's personal characteristics (such as ability, attitudes, mood, and so on) were as possible causes of her behaving the ways she did?" Participants responded on an "extremely important" to "extremely unimportant" seven-point scale. A second summary question asked about the degree to which the instructor felt the characteristics of the situation (e.g., inadequate instructions) were as causes of the behavior.

The response questions provided ten different actions ranging from "strike the assignment and compute the final grade from the remaining course points" to "assign a below average grade." Some of these actions were directed at the student such as "verbally reprimand the student," and some were directed at the task such as "re-schedule the work load." Some were positive in nature (e.g., "point out the positive things in Martha's performance") and some were negative (e.g., "express extreme disappointment in Martha's performance"). Again, summary questions were used which asked, "to what extent do you feel this incident demands that you direct your response at the student and attempt to change something about her (job attitude, level of effort, etc.)?" A second question asked, "to what extent would you want to change something about the situation?" Seven-point scales ranging from "not at all" to "to a great extent" were used on both questions.

## Results

### Manipulation Checks

An analysis of the manipulation checks showed that the mean rating for the

good work history conditions (X = 12.10) was significantly higher (t = 28.45; df = 28; p < .001) than that for the poor work history conditions (X = 2.48). The comparison of the mean ratings for the serious (X = 19.93) and non-serious conditions (X = 5.10) was also significant (t = 29.29; df = 28; p < .001) and in the expected direction. We can feel quite confident that the manipulations were successful.

**Causal Attributions**

Two hypotheses were tested for the causal attribution questions: (1) that work history, in terms of distinctiveness, consistency, and consensus, would have a main effect on an instructor's internal attributions of causality and (2) that seriousness of outcome would have a main effect on instructors' internal attributions of causality.

A 2 x 3 repeated measures MANOVA was conducted, with the dependent variables being the summary questions for the instructors' ratings of the student as a cause of the incident. The results are shown in Table 3. Poor work history led to the student being rated higher as a possible cause of the incident being

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Insert Table 3 about here

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evaluated (F = 89.12; df = 2, 27; p < .001). Also, as hypothesized, a more serious outcome resulted in the student being attributed as a possible cause of the poor performance (F = 224.92; df = 1, 28; p < .001). The interaction was also significant (F = 96.33; df = 4, 54; p < .001). The results for the summary questions asking about the degree to which the environment was seen as a cause are shown in Table 4. The environment produced a main effect for work

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Insert Table 4 about here

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history ($F = 73.56$; $df = 2, 27$; $p < .001$) as well as for the seriousness of outcome ($F = 254.91$; $df = 1, 28$; $p < .001$). The interaction was also significant ($F = 85.08$; $df = 4, 54$; $p < .001$). A poor work history and a non-serious outcome led to the environment being rated lower as a possible cause of the incident being evaluated.

The results using the combined scores for the four internal attributions (Cronbach alpha = .66) and the four external attributions (Cronbach alpha = .78) were consistent with the results reported above for the summary questions. For each of the six scenarios, the four internal attribution questions were summed and entered in paired t-tests against the four external attribution questions. The results are shown in Table 5, which indicate that under conditions where

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Insert Table 5 about here

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the student had a good work history (1, 2), the instructor attributed the cause of the poor performance to external sources. Under conditions where the student has a poor (3, 4), or no work history (5, 6), the instructor attributed the cause of the poor performance to the student. Again, a poor work history and a severe outcome produced internal attributions, while a good work history and a non-serious outcome produced external attributions.

**Responses to Poor Performance**

It was hypothesized that both work history of the student and seriousness of the outcome would influence the instructors' ratings of the appropriateness of directing a response at the student. A 2 x 3 repeated measures MANOVA, with the summary questions regarding the appropriateness of directing a response at the student as the dependent variables, provided support for these two hypotheses. These results are shown in Table 6.

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Insert Table 6 about here

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A poor work history resulted in higher ratings of a response directed at the student ($F = 96.88$; $df = 2, 27$; $p < .001$). The seriousness of the outcome also had a main effect on the choice of response ($F = 321.28$; $df = 1, 28$; $p < .001$). The interaction was also significant ($F = 90.18$; $df = 4, 54$; $p < .001$). As with the summary questions for attribution, a poor work history and a more serious outcome led to the student being rated as a possible cause of the poor performance. Results for the summary questions for an external response are indicated in Table 7. A significant effect was found for work history

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Insert Table 7 about here

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($F = 160.01$; $df = 2, 27$; $p < .001$) as well as for the seriousness of outcome ($F = 365.40$; $df = 1, 28$; $p < .001$). The interaction was also significant ($F = 152.41$; $df = 4, 54$; $p < .001$). A positive work history and a non-serious outcome was more likely to result in an external attribution than a negative work history and a serious outcome.

These hypotheses were tested further by doing a more detailed analysis of the specific response questions. Our classification of the ten responses gave us six items directed at the student, three at the situation, and one which suggested "take no action." The six personal responses were combined and entered in paired t-tests against the sum of the three situational responses. In order to provide a standardized base for comparison in the t-tests, the summed responses directed toward the student were divided by two. The Cronbach alphas for these two composite variables were .73 for those responses toward the

student and .88 for situational reponses. The results of the t-tests are shown in Table 8.

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Insert Table 8 about here

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The results for the personal responses were as predicted. Under circumstances where the student had a good work history (1, 2), the instructor attributed the cause of the poor performance to the situation. In those scenarios where the student had a poor or no work history (3, 4, 5, 6), the instructor attributed the cause of the poor performance to external sources. As with the summary questions, the more serious the outcome, the more likely the attribution would be made internally.

**Attributions and Responses**

Hypothesis three suggested that internal attributions would be related to responses directed at the student. To test this hypothesis, we correlated the summary attribution questions with the summary response questions. The more the instructor thought the student was the cause of the poor performance, the more he or she considered it appropriate to direct a response to the student ($r = .47$, $p < .01$). Also, the more the teacher felt that the situation was responsible, the more he or she considered it appropriate to direct a response toward the situation ($r = .64$, $p < .001$).

**Bias Toward Internal Responses**

Our fourth and final hypothesis suggested that there would be a general bias on the part of instructors toward using internal attributions and internal responses. To test this hypothesis, we again used the summary questions. The mean difference between the internal attribution questions and external attribution questions was significant ($t = 13.65$; $df = 28$; $p < .001$) and in the

predicted direction. Over all six conditions, the student was more likely to be seen as the cause of the incident ($X = 29.55$) than the situation ($X = 19.00$). The results for the two summary response questions were similar. The t value was 13.5 ($df = 28$; $p < .001$) and the means were 30.10 for the internal response questions and 18.55 for the external response questions.

## Discussion and Conclusions

The purpose of this study was to investigate factors which influence an instructor's choice of behavior when confronted with incidents of poor communication performance. The data indicate that communication instructors were acting in a manner consistent with the hypotheses suggested by the attribution model presented by Mitchell and Green (1978) and Green and Mitchell (1979).

A summary of our findings is as follows. First, in their evaluation of students involved in an incident of poor performance, there was an internal bias on the part of instructors to attribute causality more to internal factors than to external factors. This bias towards internal attributions was increased when the work history of the student was poor and when the outcome was serious. Second, the behaviors chosen as responses to the poor performance were related to the attributions and the surrounding circumstances. The more internal the attribution, the more the response was directed at the student.

The confirmation of hypothesis one, that instructors do take into account students' past performances (i.e., good work history vs. poor work history) in evaluating current performances tells us that classroom performances are not evaluated as discrete events. Instructors can use the results of this finding in several ways. The first is that instructors should simply be more aware of the impact of past performances. For example, because a student " has always done well in the past" may not be an adequate reason to dismiss him or her as a

cause for failure at a later point. These findings also reveal that instructors who presume to grade assignments individually may not in actuality be doing so.

Hypothesis two reveals that the severity of the consequence does play a major role in determining instructors' reponses to poor student performances. As instructors, we tend to emphasize the major assignments in our classroom lectures. Most of us take ample time to discuss details, requirements, grading criteria, and to answer student questions. We often do not take the same amount of time or effort to explain minor assignments, which have less severe consequences to the student's final grade. Thus, when a major assignment is poorly performed, we think we have done our duty and the fault must be the student's (i.e., "The assignment requirements could not have been any clearer." "We went over this several times in class and no one had any questions!") This hypothesis confirms the notion that instructors are not consistent in reacting to major versus minor assigments which are performed poorly.

The findings from our third hypothesis re-confirm the relationships in the original model: attributions are used not only to explain events (see Figure 1, Link 1), but also to formulate our responses to events (see Figure 1, Link 2). Thus, individuals do not simply observe and evaluate, but observe, attribute, and respond accordingly. This finding extends the results found in the Mitchell and Wood (1980) study which utilized a health setting and demonstrates their applicability to an educational context. Like supervisors' evaluations of nurses' work, instructors use similar attributional processes to evaluate students' work. This is an important finding, but also a dangerous link to make in the educational setting. For instance, if an instructor were to observe a poor student performance and make an external (or situational) attribution, he or she would typically change the assignment requirements, directions, etc. However, should the instructor be incorrect, there would be a mis-attribution

and response, and therefore the wrong factor would be changed and vice versa.

Our fourth hypothesis confirmed that instructors perceive students' poor performance as significantly more internally caused rather than externally caused. This instructor bias toward judgement and evaluation has important implications for future research into attributional processes. For instance, if an assignment is done well, instructors tend to believe that (1) the student worked hard and (2) they explained the assignment adequately. However, if the assignment was performed poorly, instructors tend to believe that (1) the student was at fault for not being adequately prepared, and (2) they explained the assignment adequately. Therefore, the findings from our fourth hypothesis indicate that instructors are less likely to attribute the cause of poor performance to themselves (i.e., make external attributions and situational-directed responses) than to the student.

**Limitations**

Before turning to a discussion of the practical implications of these findings, it is important to discuss some of the limitations of the research itself. For example, we recognize that instructor responses in the context of this study represent behavioral intentions and not actual behavior; therefore, the correlation between the attribution and response may be overstated because the actual costs of implementing a particular response are not evident. However, the fact that the responses represent alternatives available to subjects in their actual work settings could be expected to, at least partially, offset this effect. Much evidence suggests that the more specific an attitude measure, the more likely it is to be related to behavior (Hall & Hall, 1976; Jaccard, King, & Bomazal, 1977). At a minimum, using self-report procedures, our study replicated the findings by Mitchell and Wood (1980) in an educational context.

A second limitation of our study involves the setting utilized. Research into classroom processes of any type is rarely, if ever, simple. In the case of interpersonal perceptions and their effects, the researcher is confronted with some particular difficulties. Some of these difficulties are held in common with many other types of cognitive psychological research and are not unique to attributional studies in the educational context. The researcher is faced with the task of gaining access to cognitions and cognitive processes that are not usually, or even ever, objects of conscious awareness. The first type of problem deals with spatial context. Teachers and pupils interact with each other over a wide range of different settings. In many respects this reflects the breadth and complexity of the teacher's role. He or she is part instructor, part child-minder, and part socialization agent. The effects of this on the nature of teacher-pupil perceptions are unknown, as it has been largely ignored by researchers. Researchers have for the most part striven to produce generalizable descriptions of the impressions that teachers and pupils hold of each other; however, this study has at least attempted to investigate the possible effects of these impressions.

Another issue for discussion focuses on the fact that the situations presented as stimulus materials in the study were extremes and unambiguous. The outcome was very serious or not very serious, the attributions were internal or external, and the consistency, distinctiveness, and consensus cues were all positive or negative. Practicing instructors are seldom presented with such clear-cut cues. There may be both internal and external explanations that are plausible. The consistency, distinctiveness, and consensus cues may not mesh well. We recognize these points. However, it was our intention in this research to demonstrate that such attributional processes occur and can have an important impact on behavior. We suspect that when we do research with situations that

are less clear cut, we will find even more uncertainty about the attributions, more uncertainty about the responses, and less severe responses. We are currently investigating some of these possibilites.

There are some theoretical issues that should be addressed as well. One would not wish to deny that teachers' perceptions of the causes of their pupils' successes and failures are a key determinant of the nature of the relationships and the interactions that occur between teacher and student. However, such attributions are by no means the only ones of any educational importance. For instance, research into the "teacher expectancy effect" (Crano & Mellon, 1978) has shown that it is the social expectations rather then the academic ones that teachers have for their pupils that are likely to have a causal influence upon pupils' later levels of academic performance. The claims made here are that the promise of attribution theory for the study of classroom processes will not be fully realized until (1) more attention is given to educational research drawing on other theoretical systems, and (2) attribution theory principles are applied to a wider variety of problems than those that have been emphasized so far.

**Implications for Future Research**

Besides theoretical support for the model, the data have some practical implications for future research. First, to the degree that attributions serve as mediators of poor performance, then a number of errors may be present in the evaluation process that warrant further research. For instance, there is considerable evidence (ours included) that teachers (or observers) may err in over attributing students' behavior to internal causes (Jones & Nisbett, 1972). This difference in the perception of causes of poor performance may lead to inaccurate appraisals and points of conflict. The consequences of these inaccurate appraisals needs to be explored further.

Additional research should also be conducted in the area of performance

feedback. In the past, the point has been emphasized that students need to receive accurate performance feedback for reasons related both to learning and to work motivation. Most frequently, in a classroom setting the instructor is seen as the primary source of such feedback. The focus of past research either has been upon the development of reliable or accurate scales for instructors to rate students, such as has been done in the area of performance appraisal (Landy & Farr, 1980), or it has been upon the needs of students to accept these appraisals. In both cases, little specific attention has been given to the instructor as an active participant in the complex interaction which requires him or her to convey information about a sensitive subject: the performance of another individual. Our research into classroom attributional processes stresses the importance of students receiving feedback from instructors that accurately reflects students' levels of performance.

The issue of student perceptions introduces another problem and potential area of research. In their review, Ilgen, Fisher, and Taylor (1979) found that in general, recipients perceive negative feedback to be more positive than it is reported to them. This fact, considered in conjunction with the tendency for instructors to skew feedback positively to students, implies that students may hold quite inflated views of their own performance. To improve the accuracy of student performance perceptions, it would seem that both instructors and students need to be made aware of the tendencies to inflate feedback and the factors that affect it.

Our data also suggest that instructors make attributions and responses partly as a function of the seriousness of the outcome. In classroom settings, these outcomes may be completely out of the student's control (e.g., a student who has missed class fails a major presentation because of a classmate's inadequate instructions.) It seems to us that the instructors would be more

efficient if they concentrated on trying to change the behavior that caused the incident rather than focusing on the outcome. What our analysis suggests is that when poor performance occurs but the outcome is not serious, the instructor is more likely to overlook the problem. This strategy can lead to serious negative consequences at some later time and is clearly not an effective means of feedback. To change behavior we much focus on the behavior, not the outcome.

The general question of whether our type of attributional analysis will be useful in understanding why some teachers appear more effective than others also must be answered. Obviously, the behavior of the teacher towards his/her students is a partial determinant of a class's success. If that behavior is in some way guided by the instructor's attributions, then we may very possibly find that effective instructors are those who seem to establish distinctive patterns of attributions, are more accurate in their causal analyses, or perhaps are more successful in avoiding some of the biasing moderators discussed earlier. We believe this to be the case and are investigating the assumption at this time.

Finally, one might ask whether there is the possibility of attributional training for teachers. Research in other areas (Dweck, 1975) indicates that attributional processes and subsequent behavior can be changed through training. First, in order to affect teachers' behavior in the described direction, there is the need to inform them of the importance of their influence on such perceptions. This effect could be achieved by in-house training procedures in which teachers would be able to learn how to interact with students in order to facilitate the use of adaptive attributional patterns. In training sessions teachers can be exposed to attribution theory principles and their application to classroom situations. An important point to recognize is that although teachers may not be able to dramatically change everything about their pupils, their actions might be a significant determinant of pupils' achievement-related behaviors.

## Conclusion

Attribution theory is explicitly concerned with the link between the attribution one makes for an event and one's reaction or behavior towards it. The previous discussion of the impact of attributions on teacher behavior, expectations, and aspirations for the student suggests that whether an instructor sees a student's poor performance as caused by internal or external factors is a crucial determinant of the kind of response he or she makes. If a teacher's natural tendency is to use internal attributions to explain a student's behavior, then the response that a teacher makes may frequently be in error and a potential source of conflict. An inappropriate response on the part of a teacher not only may fail to increase the student's possibility of performing better in the future, but also may develop unhealthy attitudes toward assigned work.

It has been clear for some time that attribution theory is capable of at least demonstrating, if not yet accounting for, some of the functional features of instructors' and students' classroom perceptions. Although the specificity of the relationship between the components of the student behavior-->teacher attribution-->teacher behavior model is not as clear as we would like, our discussion does represent a state of theorizing and research in the area. The findings and reasonings presented here show sufficient promise that an attributional perspective of education should be pursued in future research. This theory may well prove to be a significant factor in understanding student-teacher interactions and, therefore, some of the reasons for particular types of instructor behavior.

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Figure 1

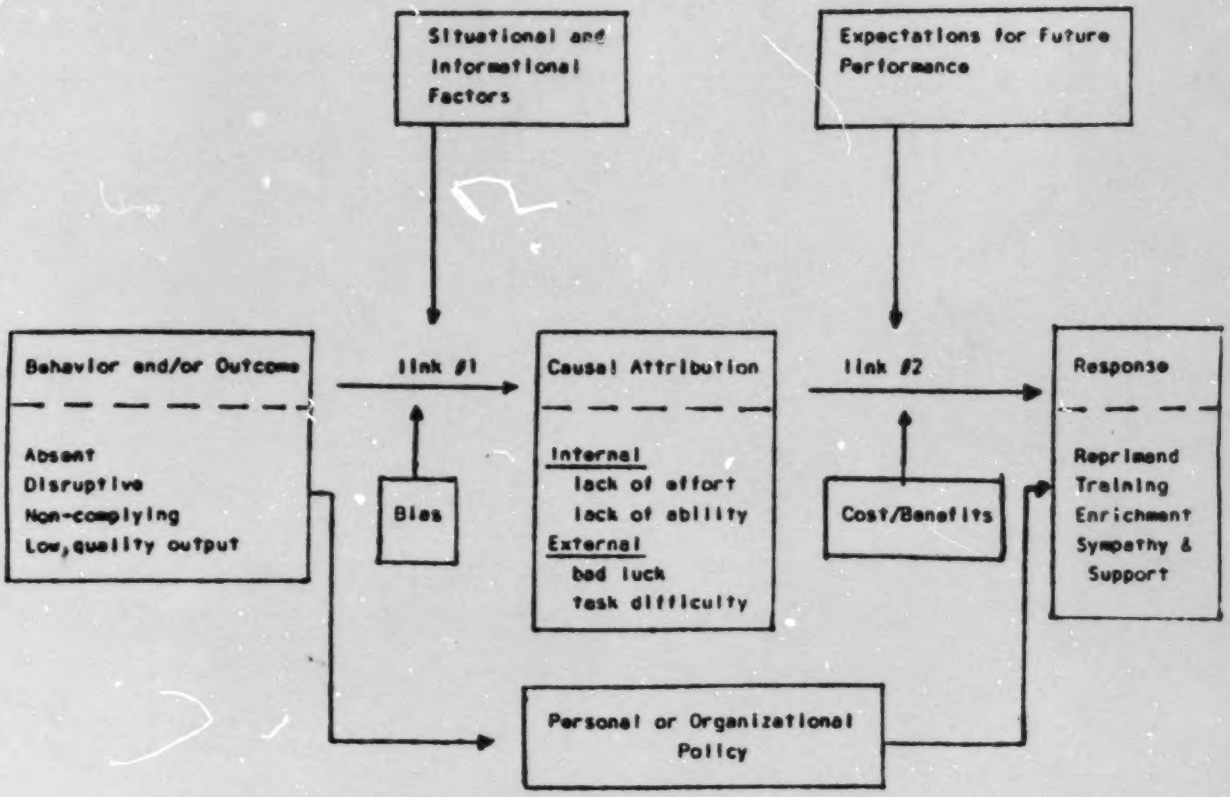


FIGURE 1 An attributional model of a leader's (teacher's) response to a subordinate's performance failure.

Table 1

RELIABILITY CHECK FOR ATTRIBUTION ITEMS

| Item | Internal No. | External No. |
|---|---|---|
| 1 | 204 (94.4) | 12 ( 5.6) |
| 2 | 20 ( 9.3) | 196 (90.7) |
| 3 | 190 (88.0) | 26 (12.0) |
| 4 | 29 (13.4) | 187 (86.6) |
| 5 | 203 (94.0) | 13 ( 6.0) |
| 6 | 30 (13.9) | 186 (86.1) |
| 7 | 198 (91.7) | 18 ( 8.3) |
| 8 | 203 (94.0) | 13 ( 6.0) |
| 9 | 193 (89.4) | 23 (10.6) |
| 10 | 9 ( 4.2) | 207 (95.8) |
| 11 | 201 (93.1) | 15 ( 6.9) |
| 12 | 23 (10.6) | 193 (89.4) |
| 13 | 204 (94.4) | 12 ( 5.6) |
| 14 | 204 (94.4) | 12 ( 5.6) |
| 15 | 202 (93.5) | 14 ( 6.5) |
| 16 | 17 ( 7.9) | 199 (92.1) |
| 17 | 18 ( 8.3) | 198 (91.7) |
| 18 | 11 ( 5.1) | 205 (94.9) |
| 19 | 207 (95.8) | 9 ( 4.2) |

NOTE: Underlined figures represent the number and percentage of respondents who selected the desired response.

Table 2

RELIABILITY CHECK FOR RESPONSE ITEMS

| Item | Positive No. | Negative No. | Situation No. |
|---|---|---|---|
| 1 | 173 (80.1) | 6 ( 2.8) | 37 (17.1) |
| 2 | 23 (10.6) | 192 (88.9) | 1 ( 0.5) |
| 3 | 74 (34.3) | 3 ( 1.4) | 139 (64.4) |
| 4 | 175 (81.0) | 7 ( 3.2) | 34 (15.7) |
| 5 | 14 ( 6.5) | 200 (92.6) | 2 ( 0.9) |
| 6 | 188 (87.0) | 3 ( 1.4) | 25 (11.6) |
| 7 | 87 (40.3) | 5 ( 2.3) | 124 (57.4) |
| 8 | 10 ( 4.6) | 202 (93.5) | 4 ( 1.9) |
| 9 | 86 (39.8) | 5 ( 2.3) | 125 (57.9) |
| 10 | 189 (87.5) | 7 ( 3.2) | 20 ( 9.3) |
| 11 | 17 ( 7.9) | 196 (90.7) | 3 ( 1.4) |
| 12 | 182 (84.3) | 4 ( 1.9) | 30 (13.9) |
| 13 | 10 ( 4.6) | 205 (94.9) | 1 ( 0.5) |
| 14 | 17 ( 7.9) | 198 (91.7) | 1 ( 0.5) |
| 15 | 183 (84.7) | 3 ( 1.4) | 30 (13.9) |
| 16 | 15 ( 6.9) | 196 (90.7) | 5 ( 2.3) |
| 17 | 20 ( 9.3) | 194 (89.8) | 2 ( 0.9) |
| 18 | 173 (80.1) | 4 ( 1.9) | 39 (18.0) |
| 19 | 9 ( 4.2) | 205 (94.9) | 2 ( 0.9) |
| 20 | 90 (41.7) | 4 ( 1.9) | 122 (56.5) |

NOTE: Underlined figures represent the number and percentage of respondents who selected the desired response.

Table 3

RESULTS FOR INTERNAL SUMMARY ATTRIBUTION QUESITONS

Summary question: In general, how important do you feel the student's personal characteristics (such as ability, attitudes, mood, and so on) were as possible causes of the poor communication behavior?

MEANS AND (STANDARD DEVIATIONS)

| | Work History | | |
|---|---|---|---|
| | Good | None | Poor |
| Serious | 1.86 (1.66) | 6.31 (0.92) | 6.34 (0.81) |
| Non-Serious | 2.00 (1.43) | 6.41 (0.77) | 6.62 (0.56) |

NOTE: Higher values indicate a higher rating for the student as a possible cause, i.e., more internal attribution

Table 4

RESULTS FOR EXTERNAL SUMMARY ATTRIBUTION QUESTIONS

Summary Question: In general, how important do you feel that the situation (inadequate instructions, midterm week, etc.) played a role in determining the student's performance?

MEANS AND (STANDARD DEVIATIONS)

| | Work History | | |
|---|---|---|---|
| | Good | None | Poor |
| Serious | 6.31 (1.39) | 1.79 (1.23) | 1.79 (1.11) |
| Non-Serious | 6.20 (1.52) | 1.68 (0.96) | 1.20 (0.41) |

NOTE: Higher values indicate a higher rating of the situation as a possible cause, i.e., more external attribution

Table 5

RESULTS FOR INTERNAL AND EXTERNAL ATTRIBUTIONS

| Scenario | Severity | Work History | External $\bar{X}$ | Internal $\bar{X}$ | t |
|---|---|---|---|---|---|
| 1 | H | G | 22.51 | 8.06 | 9.61*** |
| 2 | L | G | 20.10 | 8.48 | 7.98*** |
| 3 | H | P | 8.41 | 23.65 | -12.39*** |
| 4 | L | P | 7.31 | 23.34 | -11.14*** |
| 5 | H | N | 7.55 | 23.93 | -10.24*** |
| 6 | L | N | 6.51 | 24.93 | -17.56*** |

***$p < .001$

Table 6

RESULTS FOR INTERNAL SUMMARY RESPONSE QUESTIONS

Summary Question: To what extent do you feel that this incident demands that you direct your response to the student and attempt to change something about him or her (assignment, attitude, level of effort, etc.)?

MEANS AND (STANDARD DEVIATIONS)

| | Work History | | |
|---|---|---|---|
| | Good | None | Poor |
| Serious | 2.00 (1.48) | 6.37 (0.77) | 6.44 (0.86) |
| Non-Serious | 2.06 (1.53) | 6.62 (0.56) | 6.58 (0.56) |

NOTE: Higher values indicate a higher rating for the student as a recipient of the response, i.e., more internal response

Table 7

RESULTS FOR EXTERNAL SUMMARY RESPONSE QUESTIONS

Summary question: To what extent would you want to change something about the situation?

MEANS AND (STANDARD DEVIATIONS)

| | Work History | | |
|---|---|---|---|
| | Good | None | Poor |
| Serious | 6.39 (1.25) | 1.53 (0.92) | 1.64 (1.02) |
| Non-Serious | 6.42 (1.03) | 1.39 (0.73) | 1.46 (0.69) |

NOTE: Higher values indicate a higher rating of the situation as a recipient of the response, i.e., more external response

Table 8

RESULTS FOR INTERNAL AND EXTERNAL RESPONSES

| Scenario | Severity | Work History | External $\bar{X}$ | Internal $\bar{X}$ | t |
|---|---|---|---|---|---|
| 1 | H | G | 16.34 | 8.06 | -5.61*** |
| 2 | L | G | 17.85 | 7.48 | -7.09*** |
| 3 | H | P | 5.41 | 16.98 | 10.74*** |
| 4 | L | P | 4.37 | 17.55 | 14.60*** |
| 5 | H | N | 4.68 | 17.41 | 12.17*** |
| 6 | L | N | 4.17 | 16.82 | 17.70*** |

***$p < .001$